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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/149,001	09/08/1998	HIROTAKE NOZAKI	101516	4328

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EXAMINER
NGUYEN, LUONG TRUNG

ART UNIT	PAPER NUMBER
2612	19

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/149,001	Applicant(s) NOZAKI ET AL.	
	Examiner LUONG T NGUYEN	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 July 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 11-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 11-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Prosecution Application

1. The request filed on 7/03/2003 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/149,001 is acceptable and a CPA has been established. An action on the CPA follows.

Response to Arguments

2. Applicant's arguments with respect to claims 1-5, 11-15 filed on 7/30/2003 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-5, 11-13, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. (US 5,043,816) in view of Okino et al. (US 5,920,349) further in view of Fukuda (US 5,479,211).

Regarding claim 1, Nakano et al. disclose an electronic camera comprising image pick-up means (CCD 13, lens 11, figure 10); temporary memory means (memory 22, figure 10, column 14, lines 55-63); still image selection means for selecting the image data with the highest

evaluation of the shooting evaluation means among the image data stored in the temporary memory means (judging circuit 20, figure 10, column 14, lines 20-35); image saving means (floppy disk 28, figure 10, column 14, lines 53-63).

Nakano et al. fails to specifically disclose image compression means for compressing the image data stored in said temporary memory means and generating encoded image data. However, Okino et al. disclose an image pickup device, which includes compression circuit 7 to compress image data (generating encoded image data) before recording in recording medium 10 (figure 1, column 3, lines 20-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Nakano et al. by the teaching of Okino et al. in order to compress image data before storing in a memory. This makes the memory can store more image data.

Nakano et al. and Okino et al. fail to specifically disclose shooting evaluation means for evaluating a good or bad state of the image data imaged by said image pick-up means based on a data amount of the encoded image data generated by said image compressing means. However, Nakano et al. disclose judging circuit 20 as a shooting evaluation means for evaluating a good or bad shooting state of the image data imaged by the image pick-up means (figure 10, column 12, lines 45-55, column 13, line 60 - column 14, line 53). And Fukuda teaches judging circuit 18 for judging maximum frequency component (evaluating a good or bad state) based on compressed moving-picture data (a data amount of the encoded image data), (see abstract, figures 1-2, column 5, lines 48-61, column 6, lines 46-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Nakano et al. and Okino et al. by the teaching of Fukuda in order to eliminate the distortion of picture data.

Regarding claim 2, Nakano et al. disclose wherein the temporary memory means begins temporary storage of the image data after the release operation of the electronic camera (column 14, lines 53-59).

Regarding claim 3, Nakano et al. disclose wherein said temporary means sequentially takes in new image data from said image pick-up means and sequentially updates the image data in the temporary memory means during a waiting state of a release operation (plurality of images photographed in a shutter standby condition are temporarily stored, see abstract); and after the release operation of the electronic camera, stops the data update at the time of temporarily storing image data spanning from before to after the release operation of the electronic camera (column 14, lines 53-63).

Regarding claim 4, Nakano et al. disclose wherein said temporary memory means and said image saving means use a same memory mechanism (figure 10, both memory 22 and floppy disk 28 are used to store image data).

Regarding claim 5, Nakano et al. fail to specifically disclose wherein said temporary means differentially compressed plural frames of image data which are continuously imaged by said image pick-up means. However, Okino et al. disclose an image pickup device, which includes compression circuit 7 to compress image data before recording in recording medium 10 (figure 1, column 3, lines 20-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Nakano et al. by the

teaching of Okino et al. in order to compress image data before storing in a memory. This makes the memory can store more image data.

Regarding claim 11, Nakano et al. disclose wherein, as at least one of the good or bad evaluation of said shooting state, said shooting evaluation means detects a blurring amount and/or a misfocus amount of said image pick-up means (column 14, lines 1-52).

Regarding claim 12, Nakano et al. fail to specifically disclose wherein, as at least one of the good or bad evaluation of said shooting state, said shooting evaluation means determines the spatial frequency component of said image data. However, Okino et al. disclose an image pickup device which identifies a block rich in high-frequency component to detect the focus of a phototaking optical system (column 1, line 60 - column 2, line 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Nakano et al. by the teaching of Okino et al. in order to provide an image pickup device capable of automatic focusing function and still having a small power consumption (column 1, lines 59-61).

Regarding claim 13, Nakano et al. and Okino et al. fail to specifically disclose wherein said shooting evaluation means determines a high-area component amount of the spatial frequency, based upon a compressed amount of said image data. However, Fukuda teaches judging circuit 18 for judging maximum frequency component based on compressed moving-picture data (see abstract, figures 1-2, column 5, lines 48-61, column 6, lines 46-67). Therefore,

it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Nakano et al. and Okino et al. by the teaching of Fukuda in order to eliminate the distortion of picture data.

Regarding claim 15, all the limitations are contained in claim 1. Therefore, see Examiner's comments regarding claim 1.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. (US 5,043,816) and Okino et al. (US 5,920,349) in view of Fukuda (US 5,479,211) further in view of Uenaka (US 5,359,382).

Regarding claim 14, Nakano et al., Okino et al. and Fukuda fail to specifically disclose said shooting means determines a release time lag. However, Uenaka discloses an automatic focusing device in which a release time lag is calculated (column 8, lines 10-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Nakano et al., Okino et al. and Fukuda by the teaching of Uenaka in order to obtain more accurate focus prediction (column 8, lines 40-44).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Luong Nguyen** whose telephone number is **(703) 308-9297.** If

attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Wendy Garber**, can be reach on **(703) 305-4929.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:
(703) 872 - 9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

LN
8/10/2003

WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600